

REMARKS

Claims 30-32, 36-37, 40-49, 51-56, 59-60, 65, 67, 72-73, 80-83 and 92-109 remain in the case.

Reconsideration of this Application and entry of the foregoing amendments are requested. Claims 30, 31, 46, 47, 51, 52, 53, 55, 56, 59, 60, 65, 67 and 92-109 have been amended in view of the Office Action and to better define what the Applicants consider their invention, as fully supported by an enabling disclosure. Additional support for the amendments to the claims can be found in the previous claims. Claims 38, 66, 68 and 74 were cancelled. Previously withdrawn claims 50, 61-64, 84-91 and 110-113 were also cancelled while retaining the right to resubmit them in a divisional application.

REQUIREMENT FOR SEQUENCE LISTING COMPLIANCE

The Applicant has substituted the sequence listing filed on November 3, 2004 by that originally filed on October 18, 2001. The sequence identifier no. 14 of the current (originally filed on October 18, 2001) sequence listing defines the first and thirteen positions of the sequence recited in claim 56 as orthoaminobenzoic acid and 3-nitrotyrosine, respectively.

CLAIM OBJECTIONS

Claim 51 was amended to recite that the sequence is as set forth in any one of SEQ ID NO: 7, SEQ ID NO: 9 and SEQ ID NO: 11 of the current sequence listing (that originally filed in October 18, 2001). These sequences disclose the three possible sequences supported by the formula "Arg Xaa₁ Xaa₂ J Xaa₃ (Z)_n O" originally appearing in claim 51. These sequences represent each of the three cases where n in (Z)_n is 1, 2 or 3. Similarly, claim 52 was amended to recite any one

of SEQ ID NO: 8, SEQ ID NO: 10 and SEQ ID NO: 12 of the current sequence listing, wherein these sequences correspond to each of the cases where n in $(Z)_n$ is 1, 2 or 3.

Claim 52 now refers to SEQ ID NO: 12 which sets forth the sequence originally found in this claim.

The unnecessary punctuation in claim 53 was corrected.

DOUBLE PATENTING

Claims 38, 68 and 74 are objected to under 37 CFR 1.75 substantial duplicates of other claims, namely 38 and 68 as being duplicates of claim 32, and claim 74 as being a duplicate of claim 73. The Applicant understands that although in the first line and in the 8th line of the objection, the Examiner refers to claim 36, he meant to refer to claim 38 as is apparent from the remainder of the objection. In order to accelerate prosecution of the present application, claims 38, 68 and 74 were thus cancelled.

REJECTIONS UNDER 35 U.S.C. § 112 FIRST PARAGRAPH

The Examiner has rejected claims 46-49, 51-55, 59, 60 and 66 under 35 U.S.C. § 112, first paragraph because of their reciting the terms "and is not SKI-1" and "or SKI-1 or a part thereof".

Although the Applicant disagrees with the Examiner and reiterates that in order to provide sufficient support for a negative limitation in a claim, it is sufficient to show that it is made clear in the specification that the Applicant knew at the time of filing that the subject matter excluded by the limitation was prior art. Nevertheless, in order to accelerate prosecution, the objected wording was removed from claims 46, 47 and 51, and from their dependent claims 48, 49, 52-55, 59 and 60. Claim 66 was cancelled.

In view of the above and foregoing, it is respectfully requested that the Examiner withdraw his rejection of these claims under 35 U.S.C. § 112, first paragraph.

REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 46, 47, 56 and 66 have been rejected under 35 U.S.C. § 112, second paragraph as being indefinite. The Applicants respectfully traverse the rejection as follows.

The Applicant submits that the lining-through the number 4 in step a) of claim 46 and 47 was not very apparent in the previous amendment. The present amendment corrects this step so that number 3 now clearly appears. The term "with" was also reintroduced in step a) of claim 46.

A further step was also added in claim 46 reciting "whereby cleavage of the substrate occurs". The term "proteic" was removed from claim 47 pursuant to the Examiner's suggestion.

As indicated earlier, claim 56 now refers to SEQ ID NO: 14 of the current sequence listing which sets forth a 13 amino acid residues sequence defining the 1st and the 13th amino acids as orthoaminobenzoic acid and 3-nitrotyrosine respectively.

Claim 66 was cancelled.

In view of the above and foregoing, it is respectfully requested that the Examiner withdraw his rejection of these claims under 35 U.S.C. § 112, second paragraph.

REJECTION UNDER 35 U.S.C. § 102

Claims 30, 36, 40-52, 54, 55, 60, 65, 66, 72, 80-83 and 92-109 have been rejected as being anticipated by Brown et al. ("Brown") under 35 U.S.C. § 102(e).

Applicants respectfully traverse the rejection as follows.

The Examiner indicates that the formulation used does not make it clear that claims 30, 32, 36, 40-45, 46-59, 65, 72, 80-83, 92-109 and 114-119 recite only specific regions of SEQ ID NO: 6 so that these claims still read on Brown.

Claims 30 (and as a result dependent claims 36, 40-45, 65, 72, 80-83), 31 (and as a result dependent claims 32 and 37), 46, 47 (and as a result dependent claims 48-49), 92-97 (and as a result dependent claims 98-109 and 114-119) were amended to recite only the specified regions of SEQ ID NO: 6 by reciting the term "the amino acid sequence of which consists of [...]". Claim 66 was cancelled.

Claim 51, and as a result dependent claims 52, 53, 54, 55, 59 and 60, were amended to recite that the peptide is of a size between 7 and 13 amino acids. Support for such length is provided in previous claim 56. It is submitted that claim 51 and its dependent claims recite sequences of between 7 and 13 amino acid residues that necessarily comprise an arginine residue, and within 6 to 8 amino acid residues downstream of the arginine residue, an acidic amino acid residue, namely either a glutamate or an aspartate residue. None of the sequences that are shown in Brown's Figures 22 to 24 to be substrates of SKI-1 possess these characteristics. Hence, Figures 22 and 23 disclose the autocatalytic activity of SKI-1 on a 6 amino acid residues (SEQ ID NO: 13) see col. 67, lines 9 to 52, Table 3 at col. 68, lines 1-14; and at col. 68 line 56 to col. 69, line 6. SEQ ID NO: 13 is a 6 amino acid peptides which does not comprise an acidic residue. The legend of Brown's Figure 24 does not describe a sequence corresponding to claim 51's definition of the claimed substrate. SEQ ID NOS. 55 and 56 are peptides of 16 amino

acids. They do not therefore anticipate claim 51. They further do not make it obvious at least in that it could not be predicted that the glutamine residue at position 12 in SEQ ID NO: 55 and at position 11 in SEQ ID NO: 56 was critical.

Applicants understands that although in the first line of the first full paragraph of this objection at page 7, the Examiner refers to claim 66, he meant claim 60 which depends on claim 51.

In view of the above and foregoing, it is respectfully requested that the Examiner withdrawn his rejection of these claims under 35 U.S.C. § 102.

MISCELLANEOUS

The wording "named SKI-1" was removed from claims 30, 31, 59 and 60 because it did not assist in defining the scope of the claims. The term "(SKI-1)" was added in claims 30, 31, 59 and 60 to provide proper support for this term used in claims that depend on these claims.

Claim 55 now depends on claim 51. Support for this amendment may be found in claim 51.

All claims previously designated "withdrawn" are herein cancelled while retaining the right to resubmit them in a divisional application.

Various typographical or clerical errors were also corrected as follows: A clerical error in claim 59 was corrected by replacing the term "to" by the term "with". The term "the" is now used instead of "a" to better comply with antecedent rules. A superfluous punctuation sign was removed from claim 30. The article "a" was added before the term "SKI-1 enzyme" in the preamble of claims 46 and 47. The term "or" between the first and second options in step a) of claim 47 was removed. The term "a)" in claim 46 was removed since

the claim did not comprise a step designated "b)". Claim 59 was amended to include the term "the" before of the term "SKI-1" at its second occurrence in the claim. The term "SKI-1 fragment" was replaced by the term "soluble polypeptide of a SKI-1" in claim 65 to better comply with antecedent rules. Similarly, the term "SKI-1 fragment" was replaced by the term "polypeptide of a SKI-1" in claim 67 to better comply with antecedent rules.

CONCLUSION

The rejections of the original claims are believed to have been overcome by the present amendments and remarks. From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such an action is earnestly solicited.

Authorization is hereby given to charge deposit account no. 17-0055 for any deficiencies or overages in connection with this response.

Respectfully submitted,

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